

REMARKS

Following entry of this amendment, claims 2, 4-20, 22-36, and 38 will be pending in this application. Claims 1 and 3 are canceled herein without prejudice or disclaimer, and claim 2 is amended in part to incorporate the limitations of claim 3. Support for the amendments can be found throughout the specification and claims as filed, e.g., at pages 13-14. No new matter has been added.

In response to the restriction requirement made in the action mailed November 18, 2009, applicants elect identified Group II (claims 2, 4-19, and 22) for examination. Applicants confirm their election the species wherein the anti-AR1 chain comprises SEQ ID NOS: 1 and 2. Claims 2, 4-10, 12-19, and 22 read on the elected species. These elections are made with traverse.

The Office action states that:

The inventions of Groups I - XXXX are deemed to have no special technical feature that defines the contribution over the prior art of Ledbetter et al. (US Patent No. 6,010,902; of record). Ledbetter et al. teach bispecific antibodies which bind to the CD3 component of the T cell receptor and induce proliferation of T cells (e.g. Example 6). As one of skill in the art is aware, the T cell receptor is a heteromolecule-comprising receptor mediating the proliferation of T cells upon binding of a ligand. Therefore, the bispecific antibodies taught by Ledbetter et al. functionally substitute for the ligand of the T cell receptor and as such, the teachings of Ledbetter et al. anticipate at least the instant claim 2.

Applicants strongly disagree that U.S. Patent No. 6,010,902 ("Ledbetter") anticipates claim 2 as unamended. Solely to further prosecution, applicants have amended claim 2 to recite that the antibody substitutes for a ligand of a heterodimeric receptor and to clarify that the antibody binds to the two polypeptide chains of the heterodimer.

Claim 2 as amended is clearly novel over U.S. Patent No. 6,010,902 ("Ledbetter"), as Ledbetter does not disclose bispecific antibodies that bind to two polypeptide chains of a heterodimeric receptor. Ledbetter describes bispecific antibodies that bind to T cell factors (e.g., CD5/CD4, CD3/CD8, CD5/CD8, CD3/CD4, CD3/CD2) and can induce T cell receptor (TCR) complex signaling (calcium mobilization) and/or proliferation of T cells in the absence of MHC

bound to an antigenic peptide (the normal ligand of the TCR). However, these antibodies do not bind to a first and second polypeptide chain of a heterodimeric receptor. The TCR complex includes the TCR alpha and beta polypeptide chains, CD3 (including gamma, delta, and epsilon polypeptide chains), and a zeta polypeptide chain (CD247). The antibodies disclosed by Ledbetter do not bind to the alpha or beta polypeptide chains of the heterodimeric TCR, and the TCR complex as a whole is not a heterodimer since it contains at least six different polypeptide chains. Therefore, claim 2 and its dependent claims are novel over Ledbetter and contribute a special technical feature over the prior art: a bispecific antibody that has an activity of functionally substituting for a ligand of heterodimeric receptor having a first polypeptide chain and a second polypeptide chain, wherein the antibody binds to each of the first and second polypeptide chains. Applicants respectfully request that the Office lift the requirement for restriction among Groups I-XXXX and examine claims 2, 4-20, and 22 in their entirety.

This response is being submitted with a Petition for Extension of Time and the required fee. Please apply any other required charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 14875-0161US1.

Respectfully submitted,

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/RSMcQuade/

Ryan S. McQuade, Ph.D.
Reg. No. 61,358

Customer Number 26161
Fish & Richardson P.C.
Telephone: (617) 542-5070
Facsimile: (877) 769-7945